Papers read before the Society from February 1885 *to February* 1886.

1885.

Mar. 13. On the proposed change of the astronomical day. Professor S. Newcomb.

Note on the track of the total phase in the total Solar Eclipse of 1885, Sept. 18, in its passage across New Zealand. J. R. Hind.

Phenomena of *Jupiter's* satellites and occultations of Stars by the Moon observed at Stonyhurst, 1884. Rev. S. J. Perry.

Account of some physical observations of *Venus* in 1884. A. Stanley Williams.

Solar Eclipses and occultations by the Moon (with diagram of the Solar Eclipse Aug. 28–29, 1884, at Granada, West Indies). Rev. J. Pearson.

On variations in the light of β *Lyræ*. E. von Gothard.

Observations of Barnard's Comet (*b* 1884), made at the Natal Observatory. E. Neison.

On the value of the long inequality in the motion of the Moon, due to the disturbing action of the planet *Mars*. E. Neison.

On the proposed change of the astronomical day. Professor Th. von Oppolzer.

Notes and corrections to Sir John Herschel's synopsis of all Sir William Herschel's measures. H. Sadler.

Jupiter's IVth satellite. E. J. Spitta.

Note on the transit of *Jupiter's* satellite IV., seen at Clapham, 1885, Feb. 27. E. J. Spitta.

Note on the *Nautical Almanac* dimensions of the Saturnian system. Captain W. Noble.

On the right ascensions of the Cape Catalogues for 1850 and 1880. A. M. W. Downing.

On the star places of the *Nautical Almanac*. A. M. W. Downing.

Spectroscopic results for the motions of Stars in the line of sight obtained at the Royal Observatory, Greenwich, in the year 1884, No. VIII.

April 10. Occultations of Stars by the Moon in the years 1876-80, and resulting final equations between the errors of

April 10. the tables and the errors of observation. G. L. Tupman.

The periodicity of Solar Eclipses. Prof. C. V. Zenger.

Occultations observed at Forest Lodge, Maresfield. Captain W. Noble.

Occultation of *Aldebaran*, 1885, February 22, observed at Dun Echt, Aberdeen. Dr. R. Copeland.

Observation of the projection of *Jupiter's* 1st satellite on its own shadow, 1885, February 18, made at Dun Echt, Aberdeen. Dr. R. Copeland.

May 8. Observing weather. Rev. S. J. Johnson.

Five orders of Meteor-streams or Comets. R. A. Proctor.

Total Solar Eclipses visible in the British Isles in the years 878–1724. J. Maguire.

Observations of Comet 1884, III. (Wolf) at Harrow. G. L. Tupman.

A peculiar variety of Meteors. W. F. Denning.

Observations of *Saturn.* N. E. Green.

Note of an observation during the transit of *Jupiter's* satellite IV., 1885, April 18. E. J. Spitta.

On the right ascensions of the Cape Catalogues, 1850, 1860, and 1880. E. J. Stone.

On the diameters of the Sun and Moon as observed with the Greenwich transit-circle. W. G. Thackeray.

Reply to Mr. Stone's paper on screw errors as affecting the N.P.D. of the Cape Catalogue for 1880. David Gill.

June 12. Observations of the satellites of *Saturn* and of the companion of *Sirius* made at the United States Naval Observatory, Washington. Professor A. Hall.

Craters in the Moon. Lieut.-Colonel H. S. Knight.

The velocity of Meteors. W. F. Denning.

Ephemerides of the satellites of *Saturn*, 1885-86. A. Marth.

Ephemeris of the satellite of *Neptune*, 1885-86. A. Marth.

Elliptic elements of Comet 1883, II. (Ross). R. Bryant.

On Al-Sûfi's Star magnitudes. E. B. Knobel.

On daylight occultations of *Aldebaran* in 1885. J. R. Hind.

On some points of difference between the Harvard and Oxford Stellar Photometry No. 1. Prof. C. Pritchard.

Nov. 13. Observations of the companion of *Sirius*, made at the Dearborn Observatory, Chicago. Prof. G. W. Hough.

Observations of Comet, 1884 (Wolf) made at the Royal Observatory, Cape of Good Hope.

Observations of Comet 1884 (I.) (Pons-Brooks), made at the Royal Observatory, Cape of Good Hope.

Nov. 13. Observations of Comet 1884 (II.) (Barnard), made at the Royal Observatory, Cape of Good Hope.

On the application of a Nicol's prism to sextant observations. Captain T. Mackenzie.

The horizontal and vertical diameters of the Sun, as observed with the Greenwich transit-circle. W. G. Thackeray.

Total Solar Eclipses, A.D. 878 to 1724. J. Maguire.

Note on stationary radiant-points. R. A. Proctor.

On the proper motions of the stars L L 31296 and 31188. G. L. Tupman.

Observations of Comet 1885 (Barnard) at Harrow, with the 18½-inch equatorial reflector and ring micrometer. G. L. Tupman.

On a suspected new variable star in *Corona Borealis*. G. F. Chambers.

Ephemeris for physical observations of *Jupiter*, 1885–86. A. Marth.

On Al-Sûfi's and Ptolemy's Catalogues (extract from a letter to Mr. Knobel). Professor Schjellerup.

Daylight occultation of *Aldebaran* on July 9, 1885, observed at Forest Lodge, Maresfield. Capt. W. Noble.

On the reduction of Bessel's precessions to those of Struve. A. A. Rambaut.

Note on Mr. Chambers's suspected new variable in *Corona Borealis*. Rev. T. E. Espin.

Notes on the Total Solar Eclipse of 1885, September 9, viewed at the Terrace, Wellington, New Zealand. C. R. Marten.

Erratic Meteors. B. J. Hopkins.

Ephemeris for physical observations of *Mars*, 1886. A. Marth.

Photometric observations of the Nova in the *Andromeda* nebula, made at the Oxford University Observatory. Professor C. Pritchard.

On Dr. Wilsing's experimental examination of the wedge-photometer; and (II.) on the degree of accuracy attainable by means of that instrument. Professor C. Pritchard.

The outburst in *Andromeda*. Rev. S. J. Perry.

Observations of the spectrum of the new star in the great nebula in *Andromeda*, made at the Royal Observatory, Greenwich. E. W. Maunder.

A new form of governor for the driving clocks of equatorials. A. Hilger.

Proposal for photographing the heavens. (Letter to the President, from Admiral Mouchez.)

Dec. 11. On a suspected new variable star in *Corona Borealis*. J. E. Gore.

Dec. 11. Observations of double stars at Windsor, New South Wales. J. Tebbutt.

The *Andromeda* meteors. J. Rand Capron.

Notes of the Meteorites of Nov. 27, 1885, as seen at East Tisted Rectory, Alton, Hants. Rev. F. Howlett.

On the orbit of γ *Coronæ Australis.* J. E. Gore.

The Meteoric display of 1885, Nov. 27. Col. M. F. Ward.

Meteor shower connected with Biela's Comet. Rev. S. J. Perry.

Occultation of *Uranus* 1885, Dec. 1. Rev. S. J. Johnson.

On the term of long period due to *Mars* in the expression for the longitude of the Moon. E. Neison.

The Meteoric shower as seen at Clapham on the night of Nov. 27, 1885. E. J. Spitta.

Ephemeris for the satellites of *Uranus*, 1886. A. Marth.

The Biela Meteor shower of Nov. 27, 1885. Professor C. Pritchard.

Observations of the Meteor shower of Nov. 27, 1885, made at the Glasgow Observatory. Professor R. Grant.

On the Meteoric shower of Nov. 27, 1885. Dr. R. Copeland.

Observations of Comets Brooks, Fabry, and Barnard made at Dun Echt Observatory with the filar micrometer of the 15-in. refractor. Communicated by Lord Crawford.

La grande pluie des étoiles filantes du 27 Novembre, 1885. F. Denza.

The great shower of *Andromedes* Nov. 26, 27, 28, and 30, 1885. W. F. Denning.

General catalogue of radiant-points of shooting-stars. W. F. Denning.

Observations and orbit of the Meteor shower of 1885, November 27. G. L. Tupman.

Observations of magnitude of *Nova Andromedæ*, made at the Radcliffe Observatory, Oxford. Communicated by E. J. Stone.

On the connection between photographic action, the brightness of the luminous object, and the time of exposure as applied to celestial photography. A. C. Ranyard.

Comparison of Groombridge's and Struve's right ascensions of close circumpolar stars. Prof. T. H. Safford.

Jan. 8. Observations of the Biela's Comet meteors, made at the Royal Observatory, Greenwich.

The Meteor shower of 1885, November 27. Major G. Strahan.

Jan. 8. The Meteor shower of 1885, November 27. Major A. C. Bigg-Wither.

On a new spectroscopic method for measuring close double stars. Prof. C. V. Zenger.

Photographic maps of the stars. I. Roberts.

On a new variable star of short period. J. E. Gore.

Observations of Comet 1885 (Brooks) at Harrow with the 18½-inch equatorial reflector. G. L. Tupman.

On the new star in *Orion*. J. E. Gore.

Observations of the Meteors of 1885, November 27, made at the Radcliffe Observatory, Oxford. W. H. Robinson.

Display of Meteors, 1885, November 27. W. Wickham.

Note on the Biela Meteors. R. A. Proctor.

Ephemeris of the satellites of *Mars* 1886. A. Marth.

On the variation in colour of the *Nova Andromedæ*, and on the evidence it affords as to the origin of the *Nova*. B. J. Hopkins.

Note on Mr. Marth's "Intersects." H. H. Turner.

On a new star in the constellation of *Orion*. Dr. R. Copeland.

Observations of the Moon made at the Radcliffe Observatory, Oxford, during the year 1885, and a comparison of the results with the tabular places from Hansen's Lunar Tables. E. J. Stone.

Note on the Transit of the planet *Mars* and its satellites across the Sun's disk, which will occur for the planet *Jupiter* and its satellites on April 13, 1886. A. Marth.

Changes in the red spot on *Jupiter*. W. F. Denning.

Spectroscopic results for the motions of stars in the line of sight obtained at the Royal Observatory, Greenwich, in the year 1885, No. IX.

Observations of Comets *d* 1885 (Fabry) and *e* 1885 (Barnard), made at the Royal Observatory, Greenwich.

Observations of occultations of stars and *Uranus* by the Moon and of phenomena of *Jupiter's* satellites made at the Royal Observatory, Greenwich, in the year 1885.

Observations of the spectrum of *Nova Andromedæ*, made at the Royal Observatory, Greenwich. E. W. Maunder.

On photographs of a new nebula in the *Pleiades*, and of *Saturn*. (Letter to the President, from M. Henry.)